

Application Number 10/693,015
Amendment in Response to Office Action mailed June 4, 2008

REMARKS

This Amendment is responsive to the Office Action dated June 4, 2008. Applicant has amended claims 1, 6-8, 19, 23, 35, and 36, and canceled claims 5 and 25. Claims 1, 2, 4, 6-9, 11-13, 15-20, 22-24, and 26-40 are pending.

In view of the amendment to the claims and the following remarks, Applicant respectfully requests reconsideration and withdrawal of the rejections set forth in the Office Action.

Claim Rejection Under 35 U.S.C. § 112, second paragraph

In the Office Action, claims 39 and 40 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Office Action stated that the term "substantially" is indefinite because "[i]t is unclear from the claims and specification as to what constitutes a substantially closed loop or what would make an aperture substantially central."

Applicant traverses the rejection of 39 and 40 under 35 U.S.C. § 112, second paragraph. It is well established that the claim term "substantially" does not render claims indefinite. Accordingly, Applicant requests immediate withdrawal of the rejection.

The Court of Appeals for the Federal Circuit has found that when the term "substantially" serves reasonably to describe the subject matter so that its scope would be understood by persons in the field of the invention, and to distinguish the claimed subject matter from the prior art, the use of the claim term "substantially" does not render the claim indefinite. In *Verve v. Crane Cams, Inc.*, the court found the claim term, "substantially constant wall thickness" was definite under 35 U.S.C. § 112, second paragraph, despite a failure of the specification to define the term, because the term would be understood by persons skilled in the art.¹ The Federal Circuit reasoned that:

Expressions such as "substantially" are used in patent documents when warranted by the nature of the invention, in order to accommodate the minor variations that may be appropriate to secure the invention. Such usage may well satisfy the charge to "particularly point out and distinctly claim" the invention, 35 U.S.C. §112, and

¹ *Verve v. Crane Cams, Inc.*, 311 F.3d 1116, 65 U.S.P.Q.2d 1051 (Fed. Cir. 2002).

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indeed may be necessary in order to provide the inventor with the benefit of his invention.²

The instant case is a classic example of use of the term “substantially” to describe the subject matter so that its scope would be understood by persons in the field of the invention and use of the term “substantially” is necessary to provide Applicant with the benefit of his invention. In Applicant’s claims 39 and 40, the use of the term “substantially” reasonably describes the claimed subject matter, and one having ordinary skill in the art would understand the scope of claims 39 and 40.

For at least these reasons, withdrawal of the rejection of claims 39 and 40 under 35 U.S.C. § 112, second paragraph is respectfully requested.

Claim Rejection Under 35 U.S.C. § 102

In the Office Action, claims 1, 2, 5, 17, 19, 20, 23, 33, 39, and 40 were rejected under 35 U.S.C. § 102(e) as being anticipated by Kemper et al. (U.S. Patent Application Publication No. 2003/0222755, hereafter “Kemper”). In addition, claims 1, 2, 17, 19, 20, 33, 39, and 40 were rejected under 35 U.S.C. § 102(b) as being anticipated by Taylor et al. (U.S. Patent No. 4,899,039, hereafter “Taylor”) and under 35 U.S.C. § 102(b) as being anticipated by Tuttle et al. (U.S. Patent No. 5,963,177, hereafter “Tuttle”).

Applicant respectfully traverses the rejection of the claims to the extent such rejections may be considered applicable to the amended claims. Kemper, Taylor, and Tuttle each fails to disclose each and every feature of the claimed inventions, as required by 35 U.S.C. § 102, and provides no teaching that would have suggested modification to include such features.

Kemper

Independent Claim 1

As an initial matter, Applicant respectfully disagrees that the remote control transmitter disclosed by Kemper anticipates the medical device programmer recited in Applicant’s claim 1. While Applicant does not agree with the rejection of claim 1 over Kemper, Applicant has amended claim 1 to include the limitations recited in previously presented claim 5 to expedite

² *Id.*, 311 F.3d at 1119, 65 U.S.P.Q.2d at 1054.

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prosecution of the pending application. Amended claim 1 requires a programmer for a medical device, the programmer including a first housing member, a first circuit board within the first housing member, an internal antenna mounted within the first housing member, where the internal antenna defines an aperture, a second circuit board disposed over the first circuit board within the first housing member, a battery bay that extends into the programmer in substantial alignment with the aperture, where the battery bay extends at least partially into the aperture, and a second housing member disposed over the second circuit board.

Kemper fails to disclose or suggest each and every limitation of Applicant's amended claim 1. For example, Kemper fails to disclose or suggest a medical device programmer including a first circuit board and a second circuit board, as recited by Applicant's amended claim 1. In support of the rejection of Applicant's previously presented claim 5 (now canceled), which recited subject matter that is now incorporated into amended claim 1, the Office Action asserted that paragraph 10 of Kemper discloses that a transmitter may "include a radio frequency transmitting circuit board, and a printed circuit board."³

Applicant respectfully submits that the Office Action has mischaracterized the teachings of the Kemper reference. First, Kemper fails to disclose a "radio frequency transmitting circuit board"⁴ as alleged in the Office Action. Instead, Kemper discloses a credit card-sized transmitter that includes, among other things, a radio frequency (RF) transmitting circuit formed of an oscillator circuit and a driver circuit, a printed circuit board, and an antenna.⁵ Kemper fails to disclose or suggest that the RF transmitting circuit is an RF transmitting circuit board. The RF transmitting circuit disclosed by Kemper appears to comprise the printed circuit board, and is not a separate circuit board than the printed circuit board. Thus, Kemper fails to disclose a transmitter that includes an RF transmitting circuit board in addition to the printed circuit board, as asserted by the Office Action.

Kemper discloses that the "transmitter can be made by providing the transmitter on a printed circuit board 13, 33 and encapsulating the printed circuit board 13, 33."⁶ The reference to the printed circuit board 13, 33 by Kemper refers to printed circuit board 13, which is shown in

³ Office Action dated June 4, 2008 at page 4, item 8.

⁴ Emphasis added.

⁵ Kemper at paragraph [0010].

⁶ *Id.* at paragraph [0051].

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FIG. 1A, and printed circuit board 33, which is shown in FIG. 2A. FIGS. 1A and 2A illustrate alternative embodiments of a transmitter, each of which includes a single printed circuit board. As the above quote from Kemper clearly indicates, the transmitter is provided on a single printed circuit board. For at least these reasons, Kemper fails to disclose or suggest a programmer for a medical device including, in part, a first circuit board and a second circuit board, as recited by Applicant's claim 1 as amended.

Furthermore, even if the Office Action maintains that Kemper discloses or suggests a first circuit board and a second circuit board, an assertion with which Applicant disagrees, Kemper fails to disclose a second circuit board that is disposed over the first circuit board, as required by Applicant's claim 1 as amended. Kemper fails to disclose any spatial relationship between the RF transmitter circuit and the printed circuit board. While Kemper discloses that electronics circuitry section 9 includes a system security encoder circuit 61, an RF frequency oscillator circuit 63, and a transmitting driver circuit that drives antenna 65, Kemper fails to disclose or even suggest that the different circuits and circuitry sections are disposed on separate circuit boards or in a particular arrangement.⁷

For at least these reasons, Kemper fails to disclose or suggest a programmer for a medical device including a first circuit board and a second circuit board disposed over the first circuit board, as recited by Applicant's amended claim 1.

Independent Claim 19

While Applicant does not agree with the rejection of independent claim 19 over Kemper, Applicant has amended claim 19 to expedite prosecution of the pending application. Amended claim 19 recites, in part, a programmer for a medical device, the programmer comprising a programmer housing, a circuit board within the programmer housing, and an internal antenna mounted within the programmer housing and connected to the circuit board via a connector. Claim 19 as amended further recites that the internal antenna defines an aperture and is displaced from the circuit board. Kemper fails to disclose or suggest each and every element of claim 19 as amended.

⁷ *Id.* at paragraph [0035].

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For example, Kemper fails to disclose or suggest an internal antenna mounted within a programmer housing and connected to a circuit board via a connector, where the internal antenna is displaced from the circuit board, as required by amended claim 19. This limitation of claim 19 is similar to that recited in previously presented claim 25 (now canceled), which depended from claim 23. Applicant notes that the Office Action did not reject claim 25 in view of Kemper. Moreover, Kemper fails to disclose or even suggest that an antenna 65 is connected to and displaced from a circuit board. Instead, the antenna described by Kemper is a trace etched or plated on a printed circuit board.⁸

Applicant's claim 19 further requires a battery bay formed within the programmer housing, the battery bay being aligned substantially concentrically with the aperture, as recited by Applicant's amended claim 19. Even if Kemper discloses an antenna that defines an aperture and a battery bay, assertions with which Applicant does not necessarily agree, Kemper fails to disclose a battery bay that is aligned substantially concentrically with an aperture formed by the antenna. Kemper discloses that the antenna could "[encircle] the complete transmitter circuit (assembly) and/or battery,"⁹ but does not describe the relationship between the antenna and a battery bay. In fact, in the embodiment of the transmitter illustrated in FIGS. 1A-1C of Kemper, the trace 11 of the antenna 65 does not even encircle the battery 3. Similarly, in the embodiment illustrated in FIGS. 2A-2C, the trace 31 of the antenna 65 does not encircle the battery section 23. Thus, it is unclear how a battery bay of a battery may be aligned substantially concentrically with the antenna 65.

Kemper fails to describe the battery 3 or battery section 23 as being aligned substantially concentrically with trace 11 or 31 of antenna 65, and fails to illustrate the same. Accordingly, Kemper fails to disclose or suggest a battery bay aligned substantially concentrically with the aperture formed by the antenna, as recited by Applicant's claim 19.

For at least these reasons, Kemper fails to disclose or suggest each and every element of Applicant's independent claim 19 as amended.

⁸ *Id.* at paragraph [0041].

⁹ *Id.* at paragraph [0035].

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Dependent Claims 2, 17, 20, 23, 33, 39 and 40

Claims 2, 17, 39 and 40 depend from claim 1 and claims 20, 23 and 33 depend from claim 19. Claims 2, 17, 20, 23, 33, 39 and 40 are in condition for allowance over Kemper for at least the reasons presented above with respect to independent claims 1 and 19. Furthermore, the dependent claims introduce further limitations that are neither disclosed nor suggested by Kemper.

Applicant's claims 2 and 20 recite a battery bay that is oriented such that batteries placed in the battery bay present a load to an internal antenna. In support of the rejection of claims 2 and 20, the Office Action stated that, "[t]he Examiner takes the position that it can be seen from Figures 1-3 that the battery 3 is located within the magnetic field of the antenna 11. Therefore, the placement of the batteries in Kemper places a load on the internal antenna."¹⁰ Applicant respectfully disagrees. Kemper does not provide any support for the Office Action's assertion that the Kemper device includes a battery bay, or that the battery 3 is placed within a battery bay that is oriented such that the battery 3 presents a load to the antenna 11.

If the Office Action is taking official notice of facts not in the record or relying on common knowledge to support the assertion that the placement of the batteries in Kemper "places a load on the internal antenna,"¹¹ Applicant respectfully requests the Examiner provide documentary evidence to support the apparent assertion of knowledge in the art. As provided in the M.P.E.P. 2144.03, it is appropriate to take official notice of facts without supporting documentary evidence or to rely on common knowledge in the art in making a rejection where the facts asserted to be well-known are capable of instant and unquestionable demonstration as being well-known. In the present case, Applicant disagrees that the Office Action's proposition that a placement of batteries "within the magnetic field of the antenna 11" in Kemper "places a load on the internal antenna" is capable of instant and unquestionable demonstration as being well-known. Moreover, nothing within Kemper even suggests that the battery 3 is placed "within the magnetic field of the antenna 11," as the Office Action asserts.

¹⁰ Office Action dated June 4, 2008 at page 4, item 7.

¹¹ *Id.* at page 4, item 7.

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Kemper also fails to disclose or suggest the limitations of Applicant's amended claim 23, which recites, in part, that the circuit board of claim 19 comprises a first circuit board, and the programmer further includes a second circuit board disposed over the first circuit board. In support of the rejection of claim 23, the Office Action asserted that Kemper discloses a radio frequency transmitting circuit board and a printed circuit board.¹² However, as described above with respect to claim 1, Kemper fails to disclose or suggest a device including first and second circuit boards, or a device in which the second circuit board is disposed over the first circuit board. Thus, for at least the reasons presented above with respect to claim 1, Kemper also fails to disclose or suggest each and every limitation of Applicant's claim 23.

For at least these reasons, Kemper fails to disclose each and every limitation set forth in claims 1, 2, 5, 17, 19, 20, 23, 33, 39, and 40. Claims 1, 2, 5, 17, 19, 20, 23, 33, 39, and 40 are patentable under 35 U.S.C. § 102(b) over Kemper. Reconsideration and withdrawal of the rejection of claims 1, 2, 5, 17, 19, 20, 23, 33, 39, and 40 in view of Kemper is respectfully requested.

Taylor

Independent Claim 1

Independent claim 1 was rejected as being anticipated by Taylor. As an initial matter, Applicant respectfully disagrees that the hat disclosed by Taylor that includes a photodetector array may anticipate a medical device programmer, as required by claim 1. Moreover, the hat and photodetector array disclosed by Taylor fails to include a first housing member, an internal antenna mounted within the first housing member, where the internal antenna defines an aperture, a first circuit board within the first housing member, a second circuit board disposed over the first circuit board within the first housing member, a second housing member disposed over the second circuit board, and a battery bay that extends into the programmer in substantial alignment with the aperture, where the battery bay extends at least partially into the aperture, as recited by Applicant's amended claim 1.

¹² *Id.* at page 4, item 8.

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Taylor is generally directed to a photodetector array mounted to a soft cap.¹³ The photodetector array includes a radio transmitter assembly 12 including a battery 13, a plurality of resilient radial arms 9, and a loop antenna 14 mounted to the arms 9 and located radially outward from transmitter assembly 12.¹⁴ In support of the rejection of claim 1 over Taylor, the Office Action characterized the loop antenna 14 disclosed by Taylor as an internal antenna that defines an aperture.¹⁵ Additionally, the Office Action characterized the battery 13 as a battery bay that extends at least partially into the aperture.¹⁶

Applicant respectfully disagrees with the Office Action's characterization of the Taylor reference. For example, Taylor fails to disclose or suggest that the loop antenna 14 is an internal antenna, as asserted by the Office Action. Taylor does not disclose or suggest that the loop antenna 14 is housed in a housing or encapsulated in a material, or provide any other indication that loop antenna 14 may be construed as an internal antenna. Instead, as shown in FIGS. 1 and 2 of Taylor, the loop antenna 14 is attached to the outer surface of the soft cap 2.

Even if the Office Action maintains that loop antenna 14 of Taylor is an internal antenna, an assertion with which Applicant disagrees, Taylor fails to disclose or suggest that the loop antenna 14 is mounted within a first housing member that also includes an area that defines a battery bay. Indeed, Taylor does not even disclose a battery bay. To the extent Taylor describes a relationship between an antenna 14 and a battery itself, Taylor discloses that the battery is included in a transmitter assembly 12, and that the loop antenna 14 is "spaced radially outward from transmitter assembly 12."¹⁷ This suggests that the loop antenna 14 is not a part of the transmitter assembly 12, and, therefore, cannot be within a housing includes an area that defines a battery bay, as recited by amended claim 1.

Taylor also fails to disclose or suggest a first circuit board within a first housing member, and a second circuit board disposed over the first circuit board within the first housing member, as recited by amended claim 1. Taylor fails to disclose or suggest any type of circuit board, let alone a first circuit board and a second circuit board disposed over the first circuit board.

¹³ Taylor at Abstract.

¹⁴ *Id.* at column 2, lines 29-41.

¹⁵ Office Action dated June 4, 2008, at page 4, item 9.

¹⁶ *Id.*

¹⁷ Taylor at column 1, lines 35-41.

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Applicant notes that previously presented claim 5, the subject matter of which has been incorporated into claim 1, was not rejected over Taylor.

For at least these reasons, Taylor fails to disclose or suggest each and every limitation of amended claim 1.

Independent Claim 19

Applicant has amended claim 19 to include limitations previously recited in claim 25. Applicant notes that the Office Action did not reject claim 25 over Taylor. In addition, Applicant submits that Taylor fails to disclose or suggest each and every limitation of Applicant's independent claim 19 as amended.

For example, Taylor fails to disclose or suggest a medical device programmer including an internal antenna mounted within a programmer housing and connected to the circuit board via a connector, where the internal antenna is displaced from the circuit board. As described above with respect to the rejection of claim 1 over Taylor, Applicant respectfully disagrees that the loop antenna 14 disclosed by Taylor is an internal antenna, as suggested by the Office Action. Furthermore, Taylor fails to disclose or suggest a device including a circuit board, which is required by Applicant's claim 19.

Taylor also fails to disclose or suggest a programmer housing, an antenna mounted within the programmer housing, and a battery bay formed within the programmer housing, as recited by Applicant's claim 19. In support of the rejection of claim 19 over Taylor, the Office Action characterized the battery 13 of Taylor as a battery bay and the loop antenna 14 of Taylor as an internal antenna "mounted on the housing."¹⁸ Initially, Applicant notes that the Office Action has failed to even address the recitation of a programmer housing in claim 19. Applicant respectfully requests the Office Action to address this limitation of Applicant's claim 19 in a future communication so that Applicant is afforded an opportunity to substantively respond to the Office Action's rejection.

Applicant respectfully submits that the Office Action has mischaracterized the limitations recited by Applicant's claim 19. In particular, claim 19 does not recite an internal antenna mounted on a programmer housing, as the Office Action appears to be suggesting, but instead recites an internal antenna mounted within the programmer housing. As described above, the

¹⁸ Office Action dated June 4, 2008 at page 4, item 9. (Emphasis added.)

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Office Action failed to address Applicant's recitation of a programmer housing, and, therefore, failed to indicate how Taylor discloses or suggests an internal antenna mounted within a programmer housing that further includes a battery bay formed therein. Taylor does not teach that the loop antenna 14 is mounted within any structure, particularly a structure within which the battery bay is formed. Thus, Taylor does not disclose or suggest a programmer housing, an antenna mounted within the programmer housing, and a battery bay formed within the programmer housing, as recited by Applicant's claim 19

For at least these reasons, Taylor fails to disclose or suggest each and every limitation of amended claim 19.

Dependent claim 2, 17, 20, 33, 39, and 40

Claims 2, 17, 39, and 40 depend from claim 1, while claims 20 and 33 depend from claim 19. Claims 2, 17, 20, 23, 33, 39, and 40 are in condition for allowance over Taylor for at least the reasons presented above with respect to claims 1 and 19. In addition, Applicant notes that Taylor fails to disclose each and every limitation set forth in claims 1, 2, 17, 19, 20, 33, 39, and 40.

For example, with respect to claims 2 and 20, Taylor fails to disclose or suggest a battery bay that is oriented such that batteries placed in the battery bay present a load to an internal antenna. In support of the rejection of claims 2 and 20, the Office Action stated that, "[t]he Examiner takes the position that it can be seen from Figures 1 and 2 that the battery 13 is located within the magnetic field of the antenna 14. Therefore, the placement of the batteries in Taylor places a load on the internal antenna."¹⁹ Taylor does not disclose or suggest that the battery 13 is located in a battery bay, or that a battery bay may be oriented such that the battery 13 placed in the battery bay presents a load to an internal antenna.

If the Office Action is taking official notice of facts not in the record or relying on common knowledge to support the assertion that "the placement of the batteries in Taylor places a load on the internal antenna,"²⁰ Applicant respectfully requests the Examiner provide

¹⁹ *Id.* at page 4, item 10.

²⁰ *Id.*

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documentary evidence to support the apparent assertion of knowledge in the art. Applicant disagrees that the Office Action's proposition that placement of batteries "within the magnetic field of the antenna 14" in Taylor "places a load on the internal antenna" is capable of instant and unquestionable demonstration as being well-known. Moreover, nothing within Taylor even suggests that the battery 13 is placed "within the magnetic field of the antenna," as the Office Action asserts.

For at least these reasons, Applicant's claims 1, 2, 17, 19, 20, 33, 39, and 40 are patentable over Taylor. Reconsideration and withdrawal of the rejection of the claims in view of Taylor is respectfully requested.

Tuttle

Independent Claim 1

Tuttle also fails to disclose or suggest each and every limitation of Applicant's amended claim 1. As described above, claim 1 has been amended to include substantially all the limitations of previously presented claim 5 (now canceled). As an initial matter, Applicant notes that the Office Action did not reject previously presented claim 5 over Tuttle. Moreover, Tuttle fails to disclose or suggest a medical device programmer including a first housing member, an internal antenna mounted within the first housing member, where the internal antenna defines an aperture, a first circuit board within the first housing member, a second circuit board disposed over the first circuit board within the first housing member, a second housing member disposed over the second circuit board, and a battery bay that extends into the programmer in substantial alignment with the aperture, where the battery bay extends at least partially into the aperture, as recited by Applicant's amended claim 1.

Tuttle is generally directed to an electronic signal transmitting/receiving device that includes a matrix material formed over at least a portion of an antenna.²¹ Tuttle discloses that the device also includes integrated circuitry including transponder circuitry,²² which is in the form of a semiconductor chip mounted on a substrate.²³ The antenna and circuitry connections to the

²¹ Tuttle at column 1, lines 51-60.

²² *Id.* at column 1, lines 53-56.

²³ *Id.* at column 3, lines 65-67.

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integrated circuitry of Tuttle are formed of conductive ink printed on the substrate.²⁴ Tuttle fails to disclose or suggest that its device includes both a first circuit board and a second circuit board, and that the second circuit board is disposed over the first circuit board.

Tuttle also fails to disclose or suggest that the antenna 32 defines an aperture and a battery bay extends at least partially into the aperture. Even if the antenna 32 defines an aperture and the battery 52 is in a battery bay, assertions with which Applicant does not necessarily agree, Tuttle does not provide any indication that a battery bay extends at least partially into the aperture. Tuttle discloses that the antenna 32 is formed of conductive ink 30 formed or applied over a substrate 18, and that the battery 52 is mounted on the substrate 18 via a conductive epoxy. Tuttle does not describe the relationship between the antenna 32 and the battery 52. In particular, Tuttle does not provide disclose the relative elevations of the antenna 32 and battery 52 relative to the substrate 18. Thus, even if both the antenna 32 and battery 52 are on the substrate 18, a battery bay may not necessarily extend at least partially into an aperture defined by the antenna 32. For example, Tuttle discloses that a conductive epoxy is positioned between the battery 52 and the substrate 18, and, thus, the conductive epoxy may prevent a battery bay of the battery 52 from extending at least partially into an aperture defined by the antenna 32.

Additionally, in view of the disclosure in the Tuttle reference of epoxy encapsulation of the device, it is clear that Tuttle fails to disclose or suggest a medical device programmer including a first housing member and a second housing member disposed over the second circuit board to substantially enclose the first and second circuit boards, as recited by Applicant's claim 1 as amended. For at least these reasons, Tuttle fails to disclose or suggest each and every limitation of Applicant's amended claim 1.

²⁴ *Id.* at column 3, lines 31-41.

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Independent Claim 19

Tuttle also fails to disclose or suggest the requirements of Applicant's amended claim 19. As described above with respect to the rejection of claim 19 over Kemper, Applicant has amended claim 19 to include limitations previously recited in claim 25. Applicant notes that the Office Action did not reject claim 25 over Tuttle. Moreover, Tuttle fails to disclose or suggest each and every element of claim 19, such as a programmer including an internal antenna mounted within the programmer housing and connected to the circuit board via a connector, where the internal antenna is displaced from the circuit board.

Tuttle expressly discloses that the antenna is printed on a substrate; the same substrate on which electrical connections are also printed.²⁵ This demonstrates that the Tuttle device does not include an internal antenna mounted within the programmer housing and connected to the circuit board via a connector, where the internal antenna is displaced from the circuit board.

Additionally, Applicant notes that the Office Action has failed to address the recitation of a programmer housing in claim 19. Applicant respectfully requests the Office Action to address this limitation of Applicant's claim 19 in a future communication so that Applicant is afforded an opportunity to substantively respond to the Office Action's rejection.

For at least these reasons, Tuttle fails to disclose or suggest the each and every limitation of Applicant's claim 19.

Dependent Claims 2, 17, 20, 33, 39 and 40

Claims 2, 17, 39, and 40 depend from claim 1, and claims 20 and 33 depend from claim 19. Claims 2, 17, 20, 23, 33, 39, and 40 are in condition for allowance over Tuttle for at least the reasons presented above with respect to claims 1 and 19.

For example, with respect to claims 2 and 20, Tuttle fails to disclose or suggest a battery bay that is oriented such that batteries placed in the battery bay present a load to an internal antenna. In support of the rejection of claims 2 and 20, the Office Action stated that, "[t]he Examiner takes the position that it can be seen from Figure 1 that the battery 52 is located within the magnetic field of the antenna 32. Therefore, the placement of the batteries in Tuttle places a

²⁵ *Id.* at column 3, lines 31-41.

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load on the internal antenna."²⁶ Tuttle does not disclose or suggest that the battery 52 is located in a battery bay, or that a battery bay may be oriented such that the battery 52 placed in the battery bay presents a load to an internal antenna.

As with the rejection of claims 2 and 20 in view of Kemper and Taylor, Applicant respectfully requests the Examiner provide documentary evidence to support the apparent assertion of knowledge in the art if the Office Action is taking official notice of facts not in the record or relying on common knowledge to support the assertion that "the placement of the batteries in Tuttle places a load on the internal antenna."²⁷ Applicant disagrees that the Office Action's proposition that placement of batteries "within the magnetic field of the antenna 32" in Tuttle "places a load on the internal antenna" is capable of instant and unquestionable demonstration as being well-known. Moreover, nothing within Tuttle even suggests that the battery 52 is placed "within the magnetic field of the antenna 32," as the Office Action asserts.

Tuttle fails to disclose each and every limitation set forth in claims 1, 2, 17, 19, 20, 33, 39, and 40. For at least these reasons, claims 1, 2, 17, 19, 20, 33, 39, and 40 are patentable under 35 U.S.C. § 102(b) over Tuttle. Reconsideration and withdrawal of the rejection of the claims in view of Tuttle is respectfully requested.

Claim Rejection Under 35 U.S.C. § 103

In the Office Action, claims 1, 2, 4-9, 11, 13, 15-20, 22-28, and 30-40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stanton et al. (U.S. Patent No. 6,249,703, hereafter "Stanton") in view of Maeda et al. (U.S. Patent Application Publication No. 2002/0030630, hereafter "Maeda"). In addition, claims 12 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stanton in view of Maeda as applied to claims 1, 2, 4-9, 11, 13, 15-20, 22-28, and 30-40, and further in view of Mann et al. (U.S. Patent Application No. 2002/0107476, hereafter "Mann").

Applicant respectfully traverses the rejection of the claims under 35 U.S.C. § 103(a). The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested modification to arrive at the claimed inventions.

²⁶ Office Action dated June 4, 2008, at page 4, item 10.

²⁷ *Id.*

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Stanton in view of Maeda

Independent Claim 1

Stanton in view of Maeda fails to teach or suggest each and every limitation of Applicant's amended claim 1. For example, Stanton in view of Maeda fails to disclose or suggest a medical device programmer that includes an internal antenna defining an aperture and a battery bay in substantial alignment with the aperture, where the battery bay extends at least partially into the aperture.

In support of the rejection of claim 1 as being unpatentable over Stanton in view of Maeda, the Office Action acknowledged that Stanton fails to disclose a programmer including an internal antenna defining an aperture and a battery bay in substantial alignment with the aperture.²⁸ The Office Action looked to Maeda to cure this deficiency in Stanton. In particular, the Office Action found that FIG. 3 of Maeda discloses a telemetric communication device that includes a "substantially closed loop antenna 2" that defines a substantially central aperture and a battery 1 that is positioned such that it is in substantial alignment with the aperture.²⁹

Additionally, the previous Office Action, dated October 25, 2007, reasoned that FIG. 3 of Maeda illustrates an exploded view of the communication device, and when the communication device shown in FIG. 3 of Maeda is assembled, the battery 1 extends "at least partially into the aperture formed by internal antenna 2."³⁰ The Office Action further reasoned that "the battery 1 of Maeda must extend at least partially into the aperture formed by antenna 2" because Maeda failed to disclose otherwise.³¹ Thus, the Office Action is relying on Maeda's silence as to an element required by Applicant's claims to find that the element exists.

Applicant respectfully disagrees with the Office Action's analysis. The Office Action has applied erroneous logic to find that Maeda discloses a required element of Applicant's independent claim 1. According to the Office Action, the absence of an explicit disclosure in Maeda that the battery 1 does not extend into an aperture defined by an antenna is sufficient to support the conclusion that the battery 1 extends into an aperture defined by the antenna.

²⁸ *Id.* at page 5, item 14.

²⁹ *Id.* at page 6, item 14.

³⁰ Office Action dated October 25, 2007 at pages 2-6.

³¹ *Id.* at page 3 (emphasis added).

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However, the Office Action failed to provide any support within the cited art to support the conclusion that the battery 1 of the Maeda device must extend at least partially into an aperture formed by an antenna. Maeda does not even disclose that the antenna 2 defines an aperture, much less the arrangement between the battery 1 and the antenna 2.

Given the lack of disclosure in Maeda, the Office Action appears to be relying on an improper finding of an inherent disclosure in Maeda to support the rejection of claim 1. The fact that a certain characteristic may be present in the prior art is not sufficient to establish the inherency of that result or characteristic.³² The Office Action must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.³³ No reasonable support has been provided for the determination that the battery 1 in the Maeda reference necessarily extends at least partially into an aperture defined by the antenna 2 based on FIG. 3 of Maeda. Rather, other configurations between the battery 1 and antenna 2 are just as likely in view of the lack of description provided by the Maeda reference. Accordingly, Applicant submits that the allegedly inherent characteristic does not necessarily flow from the teachings of Maeda, and that the Office Action has relied on an improper finding of inherent disclosure in Maeda to reject independent claim 1.

FIG. 3 of Maeda does not disclose or suggest a battery bay that extends at least partially into an aperture defined by an internal antenna, as suggested by the Office Action. According to Maeda, FIG. 3 (copied below) shows a schematic view of an antenna mounted in a portable radio communication device.³⁴ The communication device includes a center-fed loop antenna 2 that is a magnetic field-type antenna and a dipole, electric field-type antenna, which is defined by a cover of battery 1, a shield plate 4, and a finger 6 of a human being.³⁵

³² *In re Rijnckaert*, 9 F.3d 1531, 1534, 28 USPQ.2d 1955, 1957 (Fed. Cir. 1993); MPEP § 2112.

³³ *Ex parte Levy*, 17 USPQ.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original); MPEP 2112.

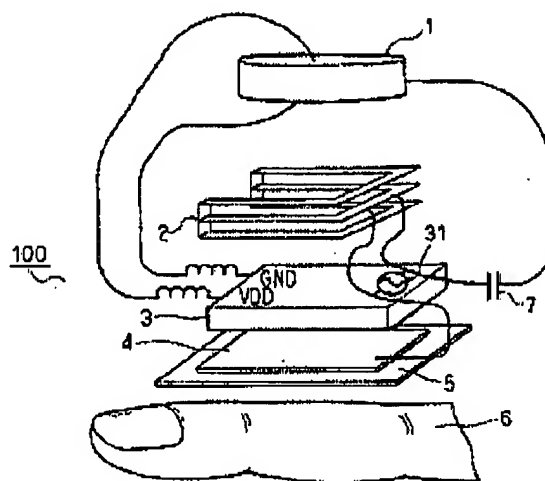
³⁴ Maeda at paragraph [0012].

³⁵ *Id.* at paragraphs [0026] and [0033].

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FIG. 3



At no time does Maeda disclose that FIG. 3 illustrates an **exploded view** of a communication device. Even assuming FIG. 3 shows an exploded view of a device, Maeda completely lacks any written description to support the Office Action's position that Maeda discloses a device in which the battery 1 extends at least partially into an aperture defined by an antenna 2. Maeda does not describe the physical relationship between the battery 1 and antenna 2 when the device is assembled. Furthermore, FIG. 3 does not provide assembly lines that indicate or even suggest a physical arrangement between the battery 1 and antenna 2 when the communication device is assembled. Accordingly, the Office Action appears to lack any reasonable basis for asserting that Maeda teaches a specific relationship between the battery 1 and antenna 2.

Maeda fails to disclose, either explicitly or implicitly, that the battery 1, which is a part of a different type of antenna than antenna 2, extends at least partially into an aperture defined by the antenna 2 when its device is assembled. Maeda neither discusses the size of the antenna 2 nor the aperture (which Applicant disputes is even an aperture) defined by such the antenna. Based on the disclosure provided by Maeda, it is unclear whether the alleged aperture defined by the antenna 2 in Maeda would be large enough to allow the battery 1 to extend at least partially into the aperture. In fact, based on FIG. 3, Applicant submits that even if the antenna 2 defines an aperture, the battery 1 appears to be too large to extend at least partially into any aperture defined by the antenna 2.

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Maeda fails to disclose or suggest that an arrangement in which the battery 1 extends at least partially into an aperture defined by the antenna 2 provides an advantage or that the communication device must include a battery extending at least partially into an aperture defined by the antenna. Given the lack of disclosure in Maeda and the minimal details offered by Maeda, it is unclear whether the arrangement between the battery and antenna suggested by the Office Action would even facilitate proper operation of the Maeda communication device.

The Office Action also stated, "it would have been obvious to one having ordinary skill in the art to try the finite number of different configurations of antenna and battery described and illustrated by Maeda in order to ascertain the optimum characteristics for the device."³⁶ The Office Action appears to be applying an improper "obvious to try" rationale to support the rejection of independent claim 1. An "obvious to try" rationale is improper where the prior art gives no indication of which parameters are critical.³⁷ In the present case, neither Maeda nor Stanton even discusses the configuration between an antenna and a battery, much less gives an indication of which parameters relating to the configuration of the antenna 2 and battery 1 are critical to the operation of the Maeda communication device. More importantly, neither Maeda nor Stanton recognizes that the configuration between a battery bay and an internal antenna may provide any advantages.

Contrary to the Office Action's statement in support of the rejection of independent claim 1, there is no apparent reason for one skilled in the art, based on the Maeda and Stanton disclosures, to "ascertain the optimum characteristics for the device" by modifying the configuration between an antenna and battery bay. Maeda only illustrates one configuration of an antenna and battery, whereby the battery does not extend at least partially into an aperture defined by the antenna. Moreover, Maeda and Stanton do not disclose how the configuration between the battery bay and antenna affect the "characteristics of the device," nor do Maeda and Stanton suggest that the arrangement between the battery 1 and antenna 2 is a critical parameter for the communication device.

The Office Action failed to meet the burden of demonstrating that it was obvious to try various configurations between an antenna and battery to arrive at Applicant's claimed invention.

³⁶Office Action dated June 4, 2008 at page 6, item 14.

³⁷ See, e.g., M.P.E.P. 2145, citing *In re O'Farrell*, 853 F.2d 894, 903, 7 U.S.P.Q.2d 1673, 1681 (Fed. Cir. 1988).

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For example, the Office Action failed to articulate reasons that, at the time of the invention, there was a recognized problem or need in the art, or that there were a finite number of identified, predictable solutions to the recognized problem or need.³⁸ For at least these reasons, the Office Action's proposed "obvious to try" rationale is improper, and the rejection of the claim Applicant's claim 1 should be withdrawn.

It is also unclear why one skilled in the art would have looked to Maeda to modify the Stanton medical device programmer. The Office Action reasoned that it would have been obvious to one having ordinary skill in the art at the time of the invention to combine Stanton with Maeda "in order to facilitate a more isotropic configuration of the telemetric energy."³⁹ The Office Action offered no other apparent reason for modifying the Stanton medical device programmer to include the communication device disclosed by Maeda.

While Maeda may teach a communication device that combines two types of antennas, i.e., a center-fed, magnetic field-type loop antenna 2 and an electric field-type dipole antenna in order to make the directivity of the antenna more isotropic,⁴⁰ Applicant respectfully submits that the Office Action's proposed reason for modifying the Stanton medical device programmer in view of Maeda is insufficient to support the combination of Maeda and Stanton. Instead, the Office Action appears to have relied on impermissible hindsight to propose modifying Stanton to include the communication device of Maeda.

As an initial matter, Applicant notes that the cited references fail to disclose or even suggest how a more isotropic configuration of telemetric energy provides any advantages to the medical device programmer of Stanton. Accordingly, the Office Action's proposed reason for modifying Stanton in view of Maeda lacks any rational underpinning, e.g., lacks any explanation of why one skilled in the art at the time the claimed invention was made would have looked to modify Stanton to include the Maeda communication device including two antennas so as to make the directivity of the device more isotropic. Instead, the reason for modification proposed by the Office Action is merely a conclusory statement pulled directly out of Maeda and lacks a reasonable relationship to the proposed modification of the Stanton programmer.

³⁸ M.P.E.P. 2143(E).

³⁹ Office Action dated June 4, 2008 at page 6, item 14.

⁴⁰ Maeda at paragraph [0033].

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If the Office Action is relying on scientific theory to support the conclusion that a more isotropic configuration of telemetric energy is a desirable modification to the Stanton medical device programmer, the Office Action must provide evidentiary support for the existence and meaning of that theory.⁴¹ Similarly, if the Office Action is relying on official notice to support the assertion that it is well known that a more isotropic configuration of telemetric energy is a reasonable rationale for modifying Stanton in view of Maeda, Applicant respectfully submits that the Office Action is relying on an improper Official Notice and traverses the Official Notice. M.P.E.P. § 2144.03 provides guidance as to when it is appropriate to assert that facts are well known. As previously discussed, "it would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known."⁴² Applicant submits that the assertion presented by the Office Action that a more isotropic configuration of telemetric energy is a valid apparent reason to combine Stanton with Maeda is not capable of instant and unquestionable demonstration as being well-known.

Furthermore, Stanton in view of Maeda also fail to disclose or suggest a programmer for a medical device including a first circuit board and a second circuit board disposed over the first circuit board, as recited by Applicant's amended claim 1. This limitation of amended claim 1 was recited in previously presented claim 5, the limitations of which have been substantially incorporated into amended claim 1.

In support of the rejection of claim 5, the Office Action characterized the integrated circuit 50 in the Stanton reference as a first circuit board and the transmitter circuit 52 as a second circuit board.⁴³ As acknowledged by the Office Action, Stanton does not state that the transmitter circuit 52 is disposed on a circuit board that is separate from the integrated circuit 50. However, the Office Action took the position that "it is well known in the art to dispose circuits of different configurations on circuit boards, as can be seen from the specification of Stanton relating to integrated circuit 50 disposed on a circuit board,"⁴⁴ and reasoned, "it would have been obvious to one having ordinary skill in the art at the time of the invention to dispose the circuit

⁴¹ M.P.E.P. 2144.02, citing *In re Grose*, 592 F.2d 1161, 201 USPQ 57 (CCPA 1979)

⁴² MPEP 2144.03.

⁴³ Office Action dated June 4, 2008 at page 7, item 17.

⁴⁴ *Id.*

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52 of Stanton on a circuit board in order to facilitate the ease with which the circuit may be connected to other electrical components."⁴⁵

Applicant respectfully disagrees with the Office Action's conclusion of obviousness. As an initial matter, Applicant notes that the Office Action referred to the integrated circuit 50 in Stanton as a circuit board, but also stated that Stanton fails to disclose or suggest that integrated circuit 50 is disposed on or connected to a circuit board.⁴⁶ Applicant respectfully requests clarification of the Office Action's position.

Stanton fails to disclose or suggest that integrated circuit 50 is a circuit board, as the Office Action initially asserted.⁴⁷ As is well-known, an integrated circuit may be formed in a semiconductor wafer, and is separate from a circuit board. Further, Stanton fails to disclose or suggest that integrated circuit 50 is disposed on or connected to a circuit board, as the Office Action later asserted.⁴⁸

The Office Action thus appears to be improperly relying on inherent disclosure to support the assertion that integrated circuit 50 is a circuit board or is disposed on a circuit board. The fact that a certain characteristic may be present in the prior art is not sufficient to establish the inherency of that result or characteristic.⁴⁹ The Office Action must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.⁵⁰ No reasonable support has been provided for the determination that the integrated circuit 50 necessarily is a circuit board or is disposed on a circuit board, as alleged by the Office Action.

⁴⁵ *Id.*

⁴⁶ *Id.* at page 7, item 17, lines 1 and 7.

⁴⁷ *Id.* at page 7, item 17, line 1.

⁴⁸ *Id.* at page 7, item 17, line 7.

⁴⁹ *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ.2d 1955, 1957 (Fed. Cir. 1993); MPEP § 2112.

⁵⁰ *Ex parte Levy*, 17 USPQ.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original); MPEP 2112.

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Even if Stanton discloses that the integrated circuit 50 is a first circuit board or is disposed on a circuit board, assertions with which Applicant disagrees, it does not necessarily follow, and the Office Action has failed to support, that the transmitter circuit 52 is disposed on a separate circuit board. The Office Action's reliance on knowledge in the art is erroneous. First, the Office Action merely asserted that "it is well known in the art to dispose circuits of different configuration on circuit boards."⁵¹ The Office Action then reasoned that "it would have been obvious. . . at the time of the invention to dispose the circuit 52 of Stanton on a circuit board."⁵² Even assuming the Office Action's reasoning is correct, an assumption with which Applicant disagrees, the Office Action has merely established that different circuits may be disposed on a circuit board. The line of reasoning set forth in the Office Action fails to provide any support for the rejection of Applicant's amended claim 1, which recites a first circuit board and a second circuit board.

Furthermore, the Office Action alleged that it is inherent that "when the device of Stanton is constructed, the first and second circuit boards will be disposed within the first and second housing members."⁵³ Assuming, *arguendo*, that the Office Action can even support the assertion that Stanton discloses first and second circuit boards, and that these circuit boards are disposed within the first and second housing member, assertions with which Applicant disagrees, Applicant's amended claim 1 requires a first circuit board within the first housing member and a second circuit board disposed over the first circuit board. The Office Action has completely failed to address this limitation of Applicant's amended claim 1. To be clear, Applicant's amended claim 1 (and previously presented claim 5, now canceled) does not simply require first and second circuit boards disposed within first and second housing members, but instead requires a second circuit board disposed over the first circuit board. Neither Stanton nor Maeda provides any disclosure that would have suggested this arrangement. The cited references fail to appreciate benefits provided by this arrangement of the first and second circuit board. For at least these reasons, Stanton in view of Maeda fail to teach or suggest the requirements of Applicant's claim 1, as amended.

⁵¹ Office Action dated June 4, 2008 at page 7, item 17. (Emphasis added.)

⁵² *Id.* (Emphasis added.)

⁵³ *Id.*

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Independent Claims 19 and 37

Stanton in view of Maeda also fails to teach or suggest each and every limitation of Applicant's amended independent claims 19 and 37. For at least the reasons discussed above with respect to independent claim 1, the applied references fail to teach or suggest a programmer for a medical device including an internal antenna mounted within the programmer housing, where the internal antenna defines an aperture, and a battery bay formed within the programmer housing, where the battery bay extends at least partially into the aperture, as required by claim 19 as amended.

The applied references also fail to teach or suggest a programmer for a medical device including a first circuit board and a second circuit board disposed over the first circuit board, as recited by Applicant's claim 37 and described above with reference to amended claim 1. Further the applied references fail to teach or suggest an internal antenna that defines an aperture mounted to the first circuit board and a battery bay formed in the first housing member adjacent the first circuit board that extends into the programmer in substantial alignment with the aperture of the internal antenna, where the battery bay extends at least partially into the aperture, as recited by Applicant's claim 37.

For at least these reasons, Stanton in view of Maeda fails to teach or suggest each and every limitation of amended independent claims 19 and 37.

Dependent Claims 2, 4-9, 11, 13, 15-18, 20, 22-28, 30-36 and 38-40

Claims 2, 4-9, 11, 13, 15-18, 35, and 38-40 depend from claim 1 and claims 20, 22-28, 30-34, and 36 depend from claim 19. Claims 2, 4-9, 11, 13, 15-18, 20, 22-28, 30-36 and 38-40 are in condition for allowance for at least the reasons presented above with respect to independent claims 1 and 19. Additionally, the dependent claims introduce further limitations that the applied references fail to teach or suggest, some of which will be discussed below for purpose of example.

For example, Stanton in view of Maeda fails to disclose or suggest the limitations of Applicant's amended claim 23, which recites, in part, that the circuit board of claim 19 comprises a first circuit board, and the programmer further includes a second circuit board disposed over the first circuit board. In support of the rejection of claim 23, similar to the rejection of claim 5

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discussed above, the Office Action characterized the integrated circuit 50 in the Stanton reference as a first circuit board and the transmitter circuit 52 as a second circuit board.⁵⁴ As described above with respect to claim 1, Stanton in view of Maeda fails to disclose or suggest a device including a first and second circuit board, or a device in which the second circuit board is disposed over the first circuit board. For at least the reasons presented above with respect to claim 1, Stanton in view of Maeda also fails to disclose or suggest each and every limitation of Applicant's claim 23.

Applicant's claims 8 and 26, which depend from claims 1 and 23, respectively, recite a programmer in which an internal antenna is mounted to the first circuit board, and a display is mounted to the second circuit board. Applicant's claims 9 and 27, which depend from claims 8 and 26, respectively, specify that the first circuit board includes telemetry circuitry and the second circuit board includes control circuitry to control a display and the telemetry circuitry.

In support of the rejection of claims 8, 9, 26, and 27, the Office Action found that Stanton discloses that an "internal antenna may be mounted on a circuit board 52 controlling telemetric operations while a display 32 may be disposed on a separate circuit board 50," and relied on FIG. 7, and column 8, lines 23–33 of Stanton as teaching the elements of claims 8 and 26.⁵⁵ Applicant submits that the Office Action appears to have misinterpreted the content of Stanton. FIG. 7 of Stanton is a schematic diagram of circuitry within a programmer, and does not illustrate circuit boards. Stanton does not disclose that the transmitter circuit 52 and LED 32, which the Office Action characterized as a display, are disposed on separate circuit boards, as required by claims 8, 9, 26, and 27.

At column 8, lines 23–33, Stanton states that:

As shown in FIG. 7, Beeper Switch 18 disposed within the battery compartment of programmer 10 is a three-position switch for enabling the user to turn the beeper off or select one of two resistors (R1 and R2 in FIG. 7) for volume settings for beeper 58. Parameter Select Switch 17, also disposed within the battery compartment, is a three-position switch for defining the function of INC and DEC keys 19 and 20. Depending upon the position of switch 17, INC and DEC keys 19 and 20 function to increase and decrease, respectively, the amplitude, rate, or pulse width of stimulating pulses delivered by implanted device 44.

⁵⁴ Office Action dated June 4, 2008 at page 7, item 17.

⁵⁵ *Id.* at page 7, item 20.

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This cited passage of Stanton does not disclose that the LED 32 and the transmitter circuit 52 are mounted to different circuit boards or that the transmitter circuit 52 is mounted to a side of the first circuit board opposite a second circuit board on which the LED 32 is mounted, and the LED 32 is mounted to a side of the second circuit board opposite the first circuit board, as required by Applicant's claims 8 and 26. The Office Action appears to have disregarded the claim limitations regarding the specific sides of the circuit boards to which the internal antenna and display are mounted.

Claims 9 and 27 further specify that the second circuit board, to which a display is mounted, includes control circuitry to control both a display and telemetry circuitry. The Office Action failed to meet the burden of demonstrating that Stanton in view of Maeda discloses this particular arrangement of first and second circuit boards, a display, control circuitry, and telemetry circuitry. To the extent the Office Action provided support for the rejection of claims 9 and 27, the Office Action cited to FIG 7 and column 8, lines 23-33 of Stanton. However, as established above, FIG. 7 is merely a schematic illustration of circuitry, and does not illustrate circuit boards. In addition, column 8, lines 23-33 of Stanton appears to be irrelevant to the recited elements of Applicant's claims 9 and 27.

Stanton in view of Maeda also fails to disclose or suggest the elements of claims 35 and 36. Claim 35, which depends from independent claim 1, and claim 36, which depends from independent claim 19, specify that an antenna is mounted to a circuit board, and a space between the internal antenna and the circuit board is substantially filled by the battery bay extending into the aperture defined by the internal antenna.

As an initial matter, Applicant notes that the Office Action has failed to meet the burden of illustrating how Stanton in view of Maeda discloses each and every element of claims 35 and 36. As provided in 37 C.F.R. 1.104(c) (2), the Office Action must designate the particular part of a reference as nearly as practicable. However, with respect to claims 35 and 36, the Office Action has failed to do so. To the extent the Office Action provided support for the assertion that Stanton in view of Maeda discloses each and every element of claims 35 and 36, the Office Action provided that:

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Maeda discloses a telemetry communication device that includes a substantially closed loop antenna 2 that defines a substantially central aperture and a battery 1 that is positioned such that it is in substantial alignment with the aperture.⁵⁶

The Office Action does not explain whether Stanton or Maeda describe or illustrate a space between an antenna and circuit board that is substantially filled by a battery bay extending into the antenna aperture.

If the Office Action was relying on the assertion that "it would have been obvious to one having ordinary skill in the art to try the finite number of different configurations of antenna and battery described and illustrated by Maeda in order to ascertain the optimum characteristics for the device"⁵⁷ to support the conclusion that claims 35 and 36 are obvious over Stanton in view of Maeda, the rejection of claims 35 and 36 was still improper. As established above, the Office Action appears to be applying an improper "obvious to try" rationale. Neither Stanton nor Maeda provide any indication that the configuration between the antenna 2 and the battery 1 is critical to any function of the Maeda communication device. Accordingly, there is no reasonable basis for concluding that it would have been obvious to arrive at the medical device programmer of claims 35 and 36 by merely varying the configuration between the antenna 2 and battery 1.

While Maeda discloses that its communication device includes a circuit plate 3, it does not necessarily follow that the battery 1 fills a space between the antenna 2 and circuit plate 3. For example, Maeda does not disclose or suggest that the battery 1 extends at least partially into an aperture defined by the antenna 2. For at least these reasons, Stanton in view of Maeda fails to disclose or suggest the elements of Applicant's claims 35 and 36, and the rejection of claims 35 and 36 should be withdrawn.

Dependent claims 39 and 40, which depend from claim 1, specify that an internal antenna defines a substantially closed loop, and that the aperture defined by the internal antenna is substantially central within the closed loop. In support of the rejection of the claims, the Office Action characterized the antenna 2 in Maeda as a "substantially closed loop antenna" that defines a substantially central aperture. Applicant respectfully disagrees with the Office Action's interpretation of a substantially closed loop antenna.

⁵⁶ *Id.* at page 5, item 14.

⁵⁷ *Id.* at page 6, item 14.

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FIG. 11 of Applicant's originally-filed disclosure, reproduced below, illustrates an internal antenna 32 that has a substantially closed loop structure 110 that defines a central aperture 112.

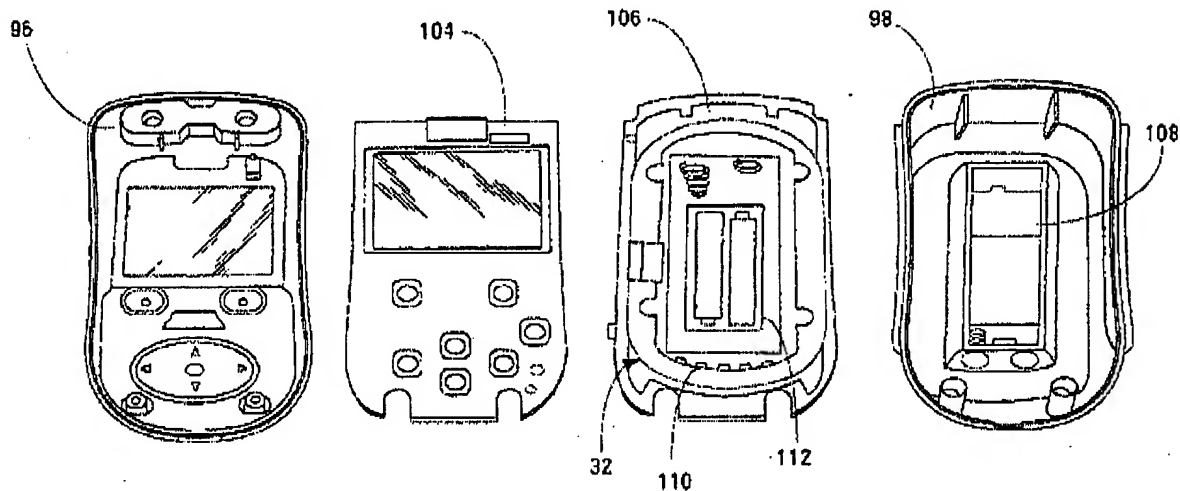


FIG. 11

In contrast, as FIG. 3 (reproduced above at page 24 of this submission) of Maeda clearly illustrates, the antenna 2 of the Maeda device does not define a substantially closed loop or an aperture, much less an aperture that is substantially central within a closed loop. The antenna 2 shown in FIG. 3 of Maeda et al. merely defines a slot, which is not a closed loop.

For at least these reasons, the Office Action has failed to establish a prima facie case for non-patentability of Applicant's claims 1, 2, 4-9, 11, 13, 15-20, 22-28, and 30-40 under 35 U.S.C. 103(a) over Stanton in view of Maeda. Reconsideration and withdrawal of the rejection of the claims as being unpatentable over Stanton in view of Maeda is respectfully requested.

Stanton in view of Maeda, further in view of Mann

The Office Action rejected claims 12 and 29 over Stanton in view of Maeda in further view of Mann. Claim 12 depends from claim 1 and claim 29 depends from independent claim 19. Mann fails to cure the deficiencies in the Stanton and Mann references identified above. Accordingly, for at least the reasons given above with respect to independent claims 1 and 19,

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Stanton in view of Maeda in further view of Mann fails to disclose or suggest the limitations of claims 12 and 29.

For at least these reasons, the Office Action has failed to establish a prima facie case for non-patentability of Applicant's claims 12 and 29 under 35 U.S.C. § 103(a) over Stanton in view of Maeda in further view of Mann. Reconsideration and withdrawal of the rejection of claims 12 and 29 as being unpatentable over Stanton in view of Maeda in further view of Mann is respectfully requested.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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By:

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